VETERANS HEALTH ADMINISTRATION - PATIENT CARE AND CLINICAL SUPPORT CHAPTER 13. EYE CLINIC

1. **REASON FOR ISSUE**: This chapter to VA HANDBOOK 7610.3, Planning Criteria for VA Facilities replaces H-08-9, Planning Criteria for VA Facilities; Chapter 233, Eye Clinic.

2. SUMMARY OF CONTENTS/MAJOR CHANGES

- a. Reduce the size of the examination/treatment room from 160 NSF to 130 NSF.
- b. Change projected program workload data from outpatients visits to clinic stops.
- c. Provide eye clinics sizing based on facility complexity levels per the planning model classifications.
- d. Provide determination factors for calculating the number of examination and treatment rooms.
- e. Provide a minor procedure room for Ophthalmologists in the largest major medical centers.
- f. Adjust waiting space to a higher utilization rate due to the two stage procedure for eye examination.
- g. Base consultation/viewing room's space on the size of the clinic.
- h. Base visual fields rooms' space on the size of clinic.
- i. Add pretesting, fitting and dispensing room and based space and type of equipment on size of clinic.
- j. Add individual rooms for ultrasound, laser and optic nerve instruments in larger clinics.
- k. Add a room for low vision training program.
- 3. **RESPONSIBLE OFFICE:** The Criteria, Post Occupancy Evaluation and Planning Support Service (105C2); Office of Infrastructure Policy and Development (105C), is responsible for the material contained in this Handbook.
- 4. **RELATED DIRECTIVE:** VA DIRECTIVE 7610, Planning Criteria for VA Facilities.
- 5. **RESCISSION:** H-08-9, Chapter 233, dated October 14, 1979, is rescinded.

CERTIFIED BY: BY DIRECTION OF THE SECRETARY

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CHAPTER 13. EYE CLINIC

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1. APPROVAL OF CRITERIA

Criteria approved by The Department of Veterans Affairs (VA) on June 6, 1996.

2. DEFINITIONS

- a. The Eye Clinic Program provides identification, evaluation and consultation for both inpatients and outpatients with signs and symptoms of vision and eye health care needs. Space requirements are affected by the level of service provided and the environments in which the services are provided. Levels of service exist on a continuum characterized by the complexity of disorders treated and the scope of the assessment and intervention provided. An examination of the prevalence of different disorders and range of services available to each will characterize the program's level of service. The levels of service are affected by the size and configuration of the facility, and by interrelationships among programs and services within the facilities.
- b. The basic eye care program should be available in every VA medical center, independent and satellite outpatient clinic and provide routine eye examinations and evaluation of eye disease, including the provision of preventative eye health care, primary eye care (including contact lenses and vision rehabilitation devices), systematic health screening, and patient health education. The workload will consist of eye examinations for every eligible veteran.
- c. A program at a general medical and surgical hospital would provide all basic services and, in addition may provide expanded eye and vision care in the area of disease diagnosis and treatment, contact lenses, comprehensive low vision rehabilitation and management of binocular vision anomalies.
- d. The establishment of a referral program would provide eye services that are unavailable at other VA facilities within the region. This includes special diagnostic in addition to complete standard ophthalmic examination equipment and complex surgical, comprehensive low vision rehabilitation and prosthetic services.
- e. The space planning criteria for eye clinics at Independent and Satellite outpatient clinics are included in VA Handbook 7610.3, Chapter 2 (265).
- **NOTE:** The workload used in planning an eye clinic is the annual number of eye care clinic-stops and includes inpatients and outpatient intervention.
 - f. Programs may have teaching and research responsibilities.
- g. The Eye Clinic Levels are based on the most current VA medical center complexity level listing. The listing ranks the facilities from the highest complexity to the lowest complexity and the facilities are divided into four levels with Level I being the most complex and Level IV being the least (Reference: ACMD for Operations memorandum entitled "Revision of the VA Medical Center Complexity Level Listing.").
 - h. Refer to the following space planning criteria chapters to determine appropriate requirements:

VA HANDBOOK 7610.3, Chapter 2 (265), Independent/Satellite Outpatient Clinic (under development). VA HANDBOOK 7610.4, Chapter 11 (410), Staff Lockers and Toilets (LLTS).

i. Refer to VA Program Guide 7610, Chapter 13, (233), Equipment Guide List, entitled Eye Clinic, for an itemized description of individual room equipment requirements.

- j. A **Basic Eye Clinic** See Appendix A for an illustrative listing of space that might typically be found in a VA Medical Center eye clinic with a full-time eye care provider, technician and receptionist and having approximately 5200 annual clinic stops.
- **3. PROGRAM DATA REQUIRED** (Issues to be resolved prior to space development.)
 - a. Planned number of annual inpatient and outpatient clinic-stops for Optometry and Ophthalmology?
 - b. Medical center complexity level.
- c. Will the eye clinic operate on a full- or part-time basis?

 (If total optometry and ophthalmology Eye Clinic workload is less than 2000 annual clinic-stops or if the clinic is not held once a week, the clinic and types of rooms therein will be provided only when approved by the designated program official.)
 - d. Planned staffing by categories.
 - e. Planned number of staff assigned to the eye clinic requiring an office?
- f. Has an Argon and /or Yag Laser Room been approved by the authorized program official for Levels III and IV?
- **4. SPACE DETERMINATIONS** (Refer to paragraph 6, Design Considerations, for explanations of what components are included in a space and other design features that need to be taken into considerations.) (Space is shown in net square meters (NSM) and net square feet (NSF).)

EYE CLINIC SPACE PROGRAM - In developing a space program for an eye clinic, apply the following space allowances in response to mission, scope of services, workload, staffing, and/or advanced training in a specialty area of practice, and/or approval of specific programs by authorized program official.

(1) Administrative	
(a) Office, Chief of Service	13.9 NSM (150 NSF)
(b) Office, Section Chief	11.2 NSM (120 NSF)
(c) Office, Secretary/Waiting	11.2 NSM (120 NSF)
(d) Clerical	7.4 NSM (80 NSF) each
(e) Office, Eye Care Provider	11.2 NSM (120 NSF) each
(f) Office, Residents and/or Students	6.5 NSM (70 NSF) for the first one Plus 4.7 NSM (50 NSF) each over one (4/room max.)
(g) Office Support Equipment Area	3.7 NSM (40 NSF)
(h) Office, Patient Receptionist	
<u>1</u> . Level I	11.2 NSM (120 NSF)
<u>2</u> . Levels II, III, IV	

to separate the instruments.

VA HANDBOOK 7610.3 (233)

per seat Plus 2.3 NSM (25 NSF) per wheelchair space. 1. Provide 4 waiting spaces per examination/treatment room. 2. 7% of total waiting spaces must be provided as open space for wheelchairs. $\underline{3}$. Number of seats = total waiting capacity minus wheelchairs spaces. (k) Consultation/Viewing Room (2) Eye Service Unit To determine the total number of examination/treatment rooms required for a particular Level, divide each workload by its corresponding exam room determination factors (from table below) and add the quotients. Apply VA rounding to the final total. **Examination/Treatment Room Determination Factors** Workload: AFFILIATED **NON-AFFILIATED CLINIC-STOPS** OPTOMETRY 2100 3000 OPHTHALMOLOGY 1800 2625 NOTE: The minimum number of examination/treatment rooms to be provided shall be two. If the results of number of E/T rooms contain a fraction value greater than 0.30, round up to the next whole number. (b) Visual Fields Rooms. Two rooms per clinic. One room for both manual and automated perimetry. A partial divider wall needed

(c) Photography Room	13.9 NSM (150 NSF)
Anterior segment camera and retinal camera.)	
(d) Pretesting, Fitting and Dispensing Room	
<u>1</u> . Level I	17.7 NSM (190 NSF)
Rotary screening center.	,
<u>2</u> . Levels II, III, IV	13.9 NSM (150 NSF)
(e) Medical Equipment Storage, Alcove	1.4 NSM (15 NSF)
(f) Wheelchair Storage Alcove	4.7 NSM (50 NSF)
(g) Ultrasound Room	
1. Levels I and II	8.4 NSM (90 NSF)
2. Levels III and IV	Not required
(h) Eye Procedure Room	
1. Level I a. Clean Utility/Supply Room b. Soiled Utility Room c. Medication Preparation room	3.7 NSM (40 NSF) 3.7 NSM (40 NSF)
2. Levels II	Provide when approved by the authorized program official.
3. Levels III and IV	Not required
(i) Laser Room (Argon and Yag)	
1. Levels I and II	· · · · · · · · · · · · · · · · · · ·
(j) Optic Nerve Analysis Room	
1. Levels I and II	
(k) Low Vision Training Program	
1. Low Vision Examination and Training Room	11.2 NSM (120 NSF)
OR	
2. Low Vision Training Room	46.5 NSM (500 NSF)

Provide when a low vision training room is authorized by program official for adaptation to prescribed devices.

NOTE: Do not provide a low vision examination and training room.

5. OPERATING RATIONALE (or BASIS FOR CRITERIA)

- a. These criteria apply to facility plans, space management and all new construction and modernization/renovation projects. In absence of eye clinic staff at the medical center, it is advisable that a member of the central office program staff, or designee, be involved at all stages of the planning process in order to ensure appropriate interpretation and implementation of these criteria.
 - b. The procedures for determining the Number Of Examination/Treatment (E/T) Rooms:

Number Of Examination/Treatment (E/T) Rooms (Number of exams generating one exam room) =

(<u>Hours Per Day Available X 60 Minutes Per Hour</u>) X Number Of Work Days X Utilization Rate Per Year Average Minutes Per Exam.

WHERE:

Hours Per Day Available X 60 Minutes Per Hour = Number of exams one room can accommodate per day Average Minutes Per Exam.

(1) The following usage factors were used to derive the examination/treatment determination factors:

	OPTOMI	ETRY	OPHTHAL	MOLOGY
		NON		NON
USAGE FACTORS	AFFILIATED	AFFILIATED	AFFILIATED	AFFILIATED
AVG. HOURS/DAY AVAIL	8	8	8	8
AVG. MINUTES/EXAM *	40	32	40	32
WORK DAYS/YEAR	250	250	250	250
UTILIZATION RATE	70%	80%	60%	70%
EXAM ROOM FACTORS	2100	3000	1800	2625

^{*} Average examination/treatment time includes set up time + average examination time + plus clean-up time.

- (2) The minimum number of examination/treatment rooms to be provided shall be two. If the results of number of E/T rooms contain a fraction value greater than 0.30, round up to the next whole number.
- c. **Reception Area** This area accommodates all activities necessary to process patients for eye care service. The area includes control counter and admissions records.
- d. **Waiting Area** Provides an area for patients to wait prior to and between periods of evaluation and treatment. Waiting area shall be out of traffic flow and under good visual control from the reception area.
- e. Unisex Wheelchair Toilet Contiguous to waiting area and shall be provided if public toilets are not available in the immediate area.

- f. **Consultation/Viewing Room** This room is the focal point of daily activity where staff, residents and students will review all cases to be seen that day. Staff members will be meeting throughout the day to discuss patient care progress and to confer with attending consultants. Activities also include training, education and film viewing of x-ray, video, MRI, CT and fluorescein angiography images.
- g. Examination/Treatment (E/T) Room The configuration of the room permits the optometrists and /or ophthalmologists to sit in front of the patient having the refraction desk on their left, and the ophthalmic stand on their right with all the necessary instruments mounted on the stand. These instruments are mounted on swinging arms, and are height adjustable, such as phoropter slit lamp located on a support table, a keratometer, a lamp on the top of ophthalmic column, and may include a chart projector. Alternatively, the chart projector may be mounted on top of the refraction desk or adjacent wall mount. The refraction desk also includes a trial lens drawer, dimmer controls and hand washing facilities. Wheelchair patients will be examined in their wheelchair.
- h. **Visual Fields Rooms** In larger clinics, two separate rooms will be used for manual and automated perimetry. These rooms will accommodate essential testing, evaluation, and monitoring of the visual fields of a patient. The patient may be either ambulant or in a wheelchair and may have glaucoma or pathology that result from diabetes mellitus, hypertension, pituitary gland abnormalities, and any other problems that may cause field loss. The rooms may also be used as a patient's darkroom adaptation. In smaller clinics, one room will be used for both manual and automated perimetry with a divided wall separating the instruments.
- i. **Photography Room** This room accommodates camera instruments and accessories for retinal and anterior segment photography and fluorescein angiography images. Cabinet space at 2.32 NSM (25 NSF) is provided for patients' film files.
- j. **Pretesting, Fitting and Dispensing Room** This room is used by the technician to assist with the performance of preliminary testing, to prepare the patient's profile, to dispense contact lenses and to fit, adjust and repair eye wear under the supervision of the optometrist/ophthalmologist.
- **NOTE:** In larger clinics, space has been provided to fit a rotary screening center which provide an auto-refractor, auto-lensometer, auto-tonometer, auto-keratometry, and auto-biometry instruments located on a single table.
- k. **Medical Equipment Storage** Space is for emergency equipment that is under the control of the eye clinic staff, such as a cardiopulmonary resuscitation (CPR) cart. This alcove should be located in the examination and treatment area, but out of normal traffic.
- 1. **Wheelchair Storage Alcove** Space for wheelchair storage should be located in a strategic location, without restricting normal traffic.
- m. **Ultrasound Room** In larger clinics, a room has been provided for an ultrasound unit with diagnostic A & B modes, a calculation/computer for intraocular lens calculations and a reclining patient chair. Some of the diagnostic uses of this instrument are for locating unseen intraocular foreign bodies, for retinal detachment and for internal view when examiner's view is blocked by blood, cataracts or when the lid cannot be opened.
- n. **Eye Procedures Room** In larger clinics, this room is for any treatment that requires surgical intervention that is deemed an "in office procedure". Procedures commonly performed in this room are chalazion excision, tarsorrhaphy, biopsy eyelid tumors, suture external eyelid lacerations, pterygium removal, etc.
- o. **Clean Utility/Supply Room** (ONLY PROVIDED WITH PROCEDURE ROOM) This room provides storage for medical supplies used in the delivery of patient care. It should be accessible from the corridor and located near the eye procedure room.
- p. **Soiled Utility Room** (ONLY PROVIDED WITH PROCEDURE ROOM) This room provides an area for cleanup of equipment, utensils and for disposal of waste material. Provides a temporary holding area for material that will be picked up by Supply, Processing and Distribution (SPD). It should be accessible from the corridor and located near the eye procedure room.
- $q. \ \, \textbf{Medication Preparation Room} \ (ONLY\ PROVIDED\ WITH\ PROCEDURE\ ROOM)\ \, \textbf{-}\ \, This\ secured\ storage\ room$ for medication is only accessible from within the staff area.

- r. **Laser Rooms** (May accommodate one or two laser instrument(s)) The laser room contains laser instrument(s), a laser cart(s), a slit lamp delivery system(s), and safety equipment. The laser instrument(s) is used in a myriad of ocular problems, i.e., diabetic retinopathy, glaucoma, retinal detachment, occludable angles/ocular hypertension, etc.
- **NOTE:** Eye clinics listed in categories Levels III and IV must obtain approval for a laser room from a designated authorized program official. This approval will be based on individual project bases and conditional on workload and on availability of contractual or shared services with local community, federal or university facilities within the immediate vicinity of the clinic.
- s. **Optic Nerve Analysis Room** This room accommodates a visual digitized imaging equipment for an optic nerve analysis system that allows direct input images and data from external instruments.

t. Low Vision Training Program

- (1) **Low Vision Examination and Training Room** This room is used for storage of low vision devices and for minor training and education of adult daily living (ADL) skills.
- (2) **Low Vision Training Room** This room is a small rehabilitation VICTORS (Visual Impairment Center to Optimize Remaining Sight) for low vision training. Patient education and eye care counseling sessions are conducted in this room so patients can learn how to use prescribed low vision aids to perform normal everyday skills and to improve their independent status.

6. DESIGN CONSIDERATIONS

- a. These criteria are based on established and anticipated standards, which are subject to modifications relative to developments in equipment, medical practice and subsequent planning and design. The selection of the scope of service is determined by VHA and anticipated medical needs.
- b. An important planning consideration is the actual size and configuration of the examination and treatment rooms. The room must reflect the fact that the patient has to see a target at the end of the room and the actual relationship of the examiner to the patient as well as traffic flow in and out of the room for mobile and mobility impaired patients. The clear inside width dimension of the room needs to be 2895 mm (9-'6"). Any less and there is no room to maneuver around the patient and anymore is mostly wasted usable space. The clear inside length of the room should be approximately 4114 mm (13'-6") to provide adequate target projection. The door to the room shall be in accordance with current accessibility standards for wheelchair access and needs to be placed in a coordinated fashion to the refraction table. Lights in the room should be controlled at least two locations, one of them being within easy reach of the examiner while examining the patient. Light dimming shall be available.
 - c. The examination and treatment room wall space must be reserved for reflecting screens and mirrors.
- d. The examination and treatment room does not require windows, but if windows exist, provision for total darkening of the room must be made.
- e. Location of the Eye Clinic within the facility should be such that it would eliminate vibration from the structure which could interfere with performance of the tests.
- f. **UFAS** The clinic must comply with the Uniform Federal Accessibility Standards (UFAS); Public Law Number 480; 42 U.S.C. 4151-4157; and VA Barrier Free Design Program, PG-18-13.
- g. Patient corridors within the eye clinic shall be 2440 mm (8'-0") wide to handle patients on gurneys. All other corridors can be a minimum of 1830 mm (6'-0") wide.

- h. Each examination and treatment room, diagnostic and procedure room will require a handwashing fixture, paper towel dispenser and waste receptacle. Sink needs to be equipped with long wrist blades or foot pedals for infection control purposes.
 - i. The laser instruments may need special power supply and/or cooling system.
- j. The eye clinic should be located within the ambulatory care area near the medical facility services or departments with which considerable interaction can be expected.
- k. Figure 13.F1 provides interfunctional relationships of Eye Clinic to other services where considerable interaction can be expected.

INTERFUNCTIONAL RELATIONSHIP MATRIX

(Relationships of EYE CLINIC to Services listed below:)

<u>Service</u>	Relationship
Ambulatory Care	1
Neurology	1
Radiology	1
MS&N Patient Care Units	3
Pharmacy	3
Supply, Processing and Distribution	3
Surgical Suite	3

PHYSICAL RELATIONSHIPS BETWEEN SERVICES

<u>Symbo</u> l	Relationship	Description
1	Especially Important	Essential for services to be adjacent
2	Important	Services to be in proximity, on the same floor.
3	Limited Importance	Services within the same building but different floors acceptable.
X	Undesirable	Separation desirable.

Figure 13.F1 - INTERFUNCTIONAL RELATIONSHIP MATRIX - EYE CLINIC

1. Administrative

BASIC EYE CLINIC SPACE

BASIC EYE CLINIC - The following is an illustrative listing of space that might typically be found in a VA medical center eye clinic with a full-time eye care provider, technician and receptionist and having approximately 5200 annual clinic-stops.

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